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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,385	02/27/2004	Jan LUNDGREN	7589.155.PCUS00	2384
28694 7590 09/10/2007 NOVAK DRUCE & QUIGG, LLP 1300 EYE STREET NW SUITE 1000 WEST TOWER WASHINGTON, DC 20005			EXAMINER COZART, JERMIE E	
			ART UNIT 3726	PAPER NUMBER
			MAIL DATE 09/10/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/708,385

Applicant(s)

LUNDGREN ET AL.

Examiner

Jermie Cozart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 10-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Havard et al. (5,483,034).

Regarding **claim 10**, Havard discloses manufacturing a hollow blade [wherein the shape of such panel can vary as a function of its location in the turbojet engine; col. 1, lines 27-28], wherein at least one support element (2) is positioned between two opposite blade walls (1, 3) of a hollow blade (see FIG.1) and joining the support element (2) together with at least one of the two opposite blade walls (1, 3) utilizing laser-welding (col. 2, lines 58-60) to produce a weld that is continuous (col. 4, line 65 – col. 5, line 2) in cross-section and along a line of laser welding from the outside (col. 2, lines 42-47) of the blade wall (1) to be joined to the support element (2) so that the joined together portions of the support element (2) and the joined blade wall (1) form a substantially T-shaped joint (col. 2, lines 61-66 and FIG. 2).

Note that "for utilization in a stator component or rotor component" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not

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depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Regarding **claim 11**, the support element (2) is arranged to extend essentially at right angles to a mean camber line of the blade because the hollow part (FIG. 1) of Harvard has essentially the same configuration as the claimed invention (Fig. 1).

Regarding **claim 12**, the support element (2) is plate-shaped (FIG. 2).

Regarding **claim 13**, the edge of the plate-shaped support element (2) is connected (FIG.2) to the blade wall (1).

Regarding **claim 14**, wherein during the manufacture of the hollow blade, the support element (2) is first positioned inside the blade and then welded firmly to the wall (1). See column 2, line 61 – column 3, line 25.

Regarding **claim 15**, wherein in cross-section (FIG. 1), an outer contour of the blade forms the shape of an airfoil.

Regarding **claims 16-18**, "wherein the stator or rotor component is configured for incorporation into a gas turbine", "wherein the stator or rotor component is configured for incorporation into a jet engine", and "wherein the stator or rotor component is configured to form at least part of an aircraft wing", have not been given patentable weight because it has been held that to be entitled to patentable weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. *Ex parte Pfeiffer*.

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Also regarding **claims 16-18**, "wherein the stator or rotor component is configured for incorporation into a gas turbine", "wherein the stator or rotor component is configured for incorporation into a jet engine", and "wherein the stator or rotor component is configured to form at least part of an aircraft wing" are recitations of the intended use, and a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Havard et al. (5,483,034).

The hollow part made by Havard et al. clearly meets the claimed structure and would be capable of being used as a stator or rotor blade. Alternatively, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used the blade of Havard et al. in rotor or stator blade applications, in order to utilize a high strength and reinforced blade structure in a rotor or stator.

Response to Arguments

5. Applicant's arguments filed 3/23/07 have been fully considered but they are not persuasive.

Applicants argue that Havard does not teach "a weld that is continuous in cross-section and along a line of laser welding".

In response, the Examiner states that Havard uses laser welding (col. 2, lines 58-60) to join the blade/plate wall (1) to the support element (2) wherein the "welding takes place continuously (see claim 2)" and it is apparent that weld is continuous in cross section since the fixing of the support element (2) to the blades/plates (1, 3) can only take place from the outside since the interior of the volume defined by the blades/plates (1, 3) are not accessible during the fixing operations of the support elements/partitions (2). *See column 2, lines 43-48 for further clarification.*

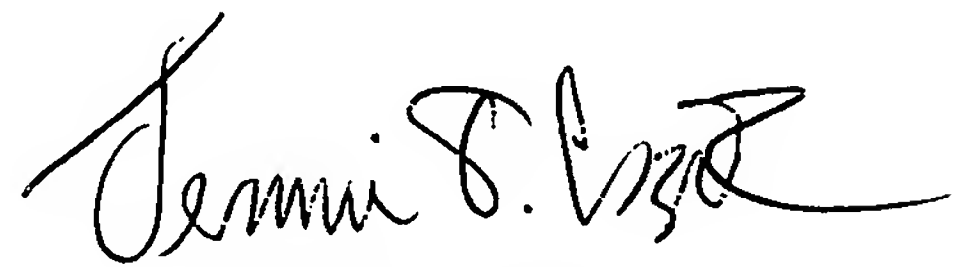
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermie Cozart whose telephone number is 571-272-4528. The examiner can normally be reached on Monday-Thursday, 7:30 am - 6:00 pm.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JERMIE E. COZART
PRIMARY EXAMINER

September 1, 2007